FIG. 1A

	BIO-DEGRADABLE	COST	OTHER COMMENTS
CHLORINE DIOXIDE	HIGHLY BIO- DEGRADABLE	MODERATE	DOES NOT FORM CHLORINA TED BY-
			FNODOCIS
SODIUM	MODERATE FOR BLEACH	ГОМ	STABILITY PROBLEMS'
HYPOCHLORITE/	CIT OPINATED BY		FORMS CHLORINATED BY-
CALCIUM HYPOCHLORITE	CHLUKIINALED BY- PRODUCTS		rkonocis
GLUTERALDEHYDE	MODERATELY HIGH AT	MODERATE TO	ODORS
•	USE CONCENTRATIONS	MODERATELY	
		HIGH	
HYDROGEN	HIGHLY BIO-	RELATIVELY LOW	STABILITY, STORAGE, AND
PEROXIDE	DEGRADABLE		HANDLING
DRY CHLORINE	LOW TO MODERATE	RELATIVELY LOW	DUSTING, HANDLING
COMPOUNDS			ISSUES
OZONE	HIGHLY BIO-	VERY HIGH IN ALL	EQUIPMENT
	DEGRADABLE	REGARDS	EXPENSIVE
			MAINTENANCE
QUATERNARY	POOR FOR MOST	MODERATELY	FOAMS INACTIVATED BY
AMMONIA	FORMULATIONS	HJIH	SOLIDS, SYNERGISTIC
COMPOUND			WITH C102
PERACETIC ACID	HIGHLY BIO-	MODERATLEY	SAFETY AND HANDLING
	DEGRADABLE	HIGH	
			-

FIG. 1B

	PH	BIOFILM	TOXICITY	CORROSIVENESS
CHLORINE DIOXIDE	NEUTRAL	VERY GOOD	NEGLIGABLE AT USE CONCENTRATIONS	NEGLIGABLE AT USE CONCENTRATIONS
SODIUM HYPOCHLORITE/ CALCIUM HYPOCHLORITE	ALKALINE	INEFFECTIVE	MAY PRODUCE CHLORINATED BY- PRODUCTS	CORROSIVE TO Fe AND AI
GLUTERALDEHYDE	NEGLIGABLE	INEFFECTIVE	MAY CAUSE SEVERE SKIN IRRITATION	MAY CAUSE SEVERE SKIN IRRITATION IN SOME INDIVIDUALS
HYDROGEN PEROXIDE	NEUTRAL	INEFFECTIVE	MAY BE EXTREMELY IRRITATING TO SKIN AND TISSUES AT USE CONCENTRATIONS	HIGH ON Fe, Al, and Zn
DRY CHLORINE COMPOUNDS	MODERATELY TO HIGH	INEFFECTIVE	MAY PRODUCE CHLORINATED BY- PRODUCTS	CORROSIVE TO Fe and Al
OZONE	NEUTRAL	INEFFECTIVE	PROBABLY NEGLIGABLE AT USE CONCENTRATIONS	CORROSIVE TO Fe and Al AT HIGHER CONCENTRATIONS
QUATERNARY AMMONIA COMPOUND	ACID TO NEUTRAL	INEFFECTIVE	SKIN AND LUNG IRRITATION	CAN BE CORROSIVE TO Fe, Cu, AND BRASS
PERACETIC ACID	NEUTRAL TO ALKALINE	INEFFECTIVE	SEVERE SKIN IRRITATION, CAN CAUSE BLINDNESS	HIGH ON Fe, Al, and Zn

FIG. 1C

	EFFICACY	MICROBIAL RANGE	CONTACT	CONCENTRATION
CHLORINE DIOXIDE	HIGH	BROAD SPECTRUM ~	SECONDS TO	0.1 PPM TO 5 PPM
		EFFECTIVE AGAINS	MINUTES	
		ALL ORGANISMS		
SODIUM	MODERATE	INEFFECTIVE	MINUTES TO	SPPM TO 100 PPM
HYPOCHLORITE/	·	AGAINST MANY	HOURS	
CALCIUM HYPOCHLORITE		ORGANISMS		
GLUTERALDEHYDE	MODERATE	SPOROCIDAL	30 MINUTES	50 PPM TO 100 PPM
	TO HIGH		TO SEVERAL	
			HOURS	J
HYDROGEN	LOW	REQUIRES HIGH	15 MINUTES	500 PPM TO 700 PPM
PEROXIDE		CONCENTRATIONS,	TO SEVERAL	
		TO ACHIEVE KILL	HOURS	
DRY CHLORINE	MODERATE	INEFFECTIVE	30 MINUTES	SPPM TO 100 PPM
COMPOUNDS		AGAINST MANY	TO SEVERAL	-
		ORGANISMS	HOURS	
OZONE	HIGH	BROAD SPECTRUM	SECONDS TO	0.1 PPM TO 10 PPM
		EFFECTIVE AGAINST	MINUTES	
		ALL ORGANISMS		
QUATERNARY	MODERATE	INEFFECTIVE	MINUTES TO	30 PPM TO 100 PPM
AMMONIA	TO HIGH	AGAINST MANY	SEVERAL	
COMPOUND		ORGANISMS	HOURS	
PERACETIC ACID	MODERATE	INEFFECTIVE	30 MINUTES	5 PPM TO 100 PPM
		AGAINST MANY	TO SEVERAL	-
		ORGANISMS	HOURS	

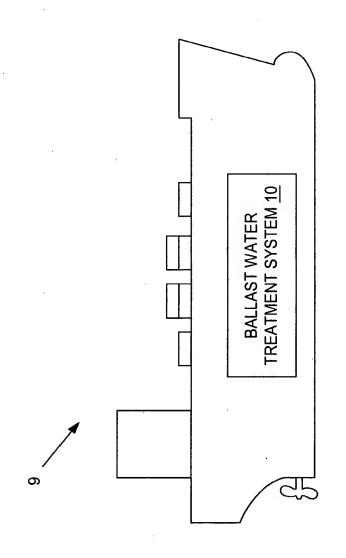
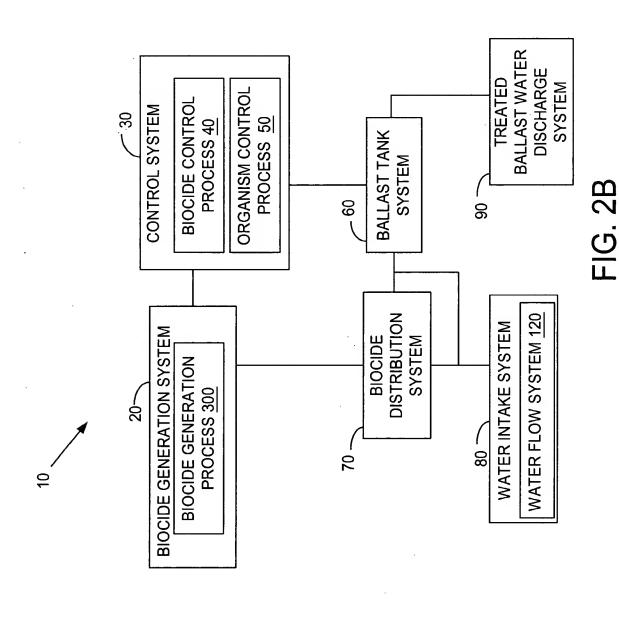


FIG. 2A



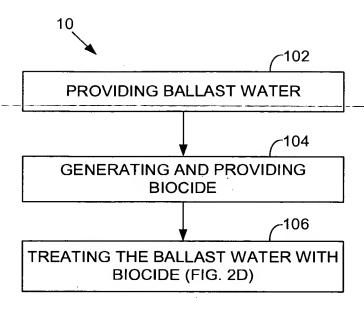


FIG. 2C

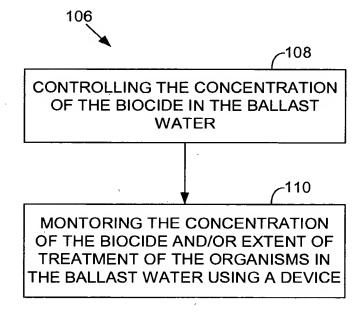
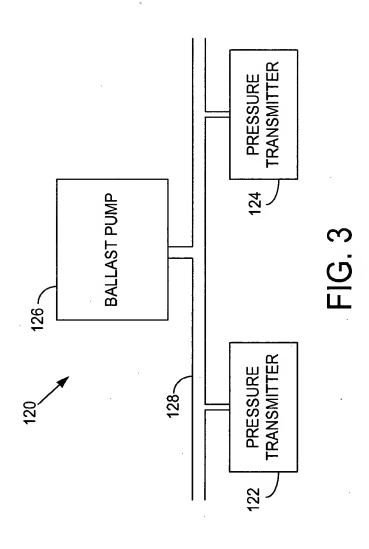
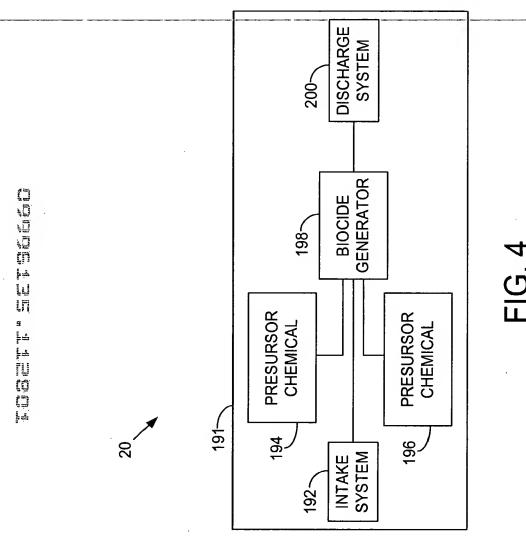


FIG. 2D





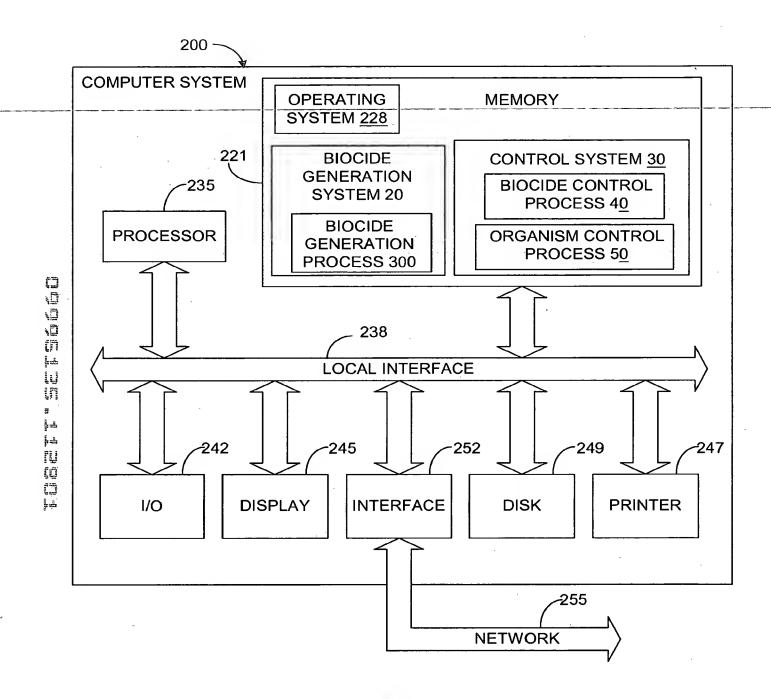
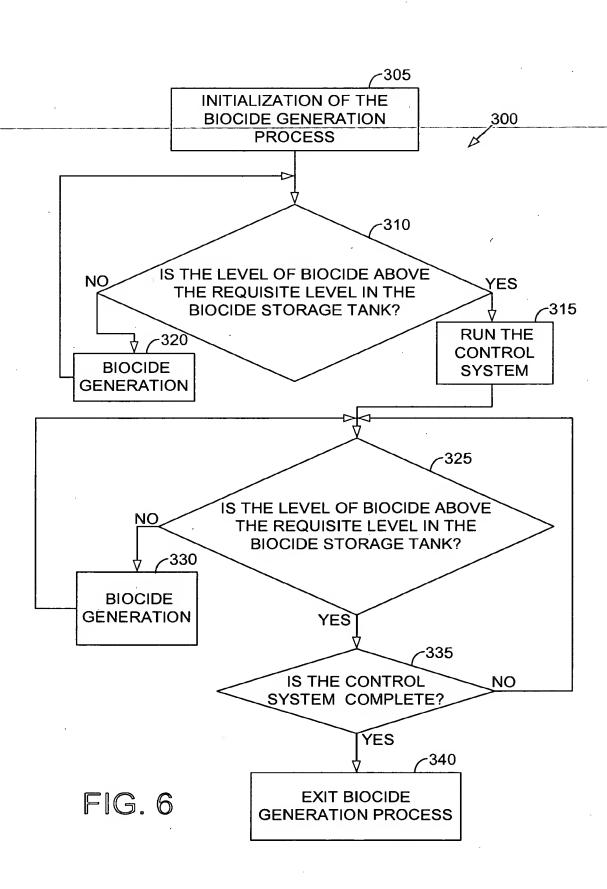


FIG. 5



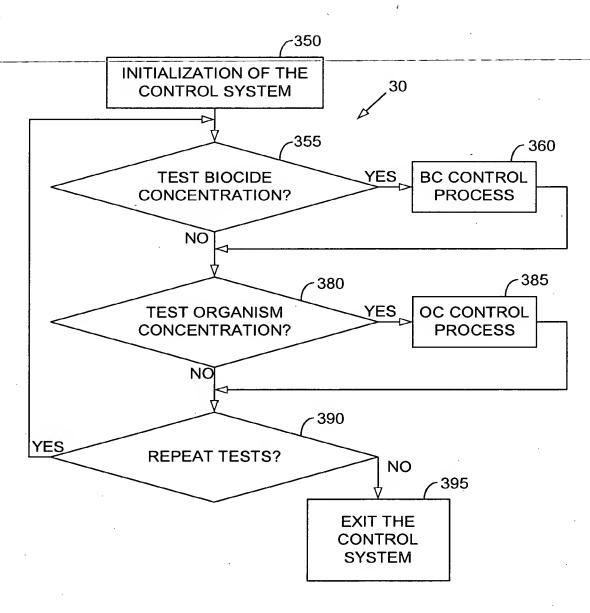


FIG. 7

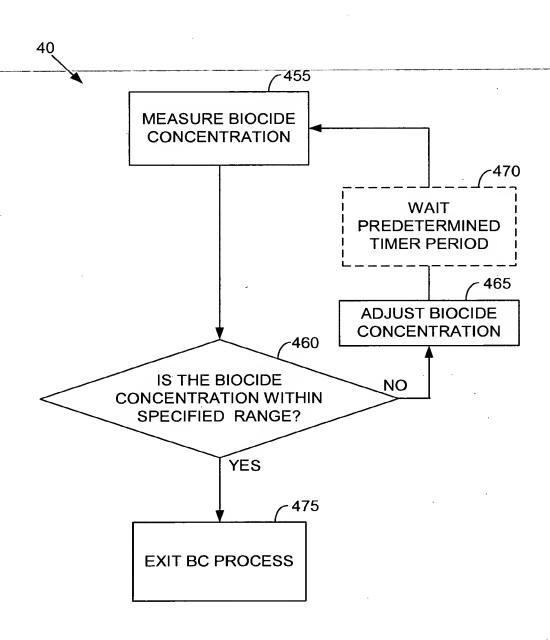


FIG. 8

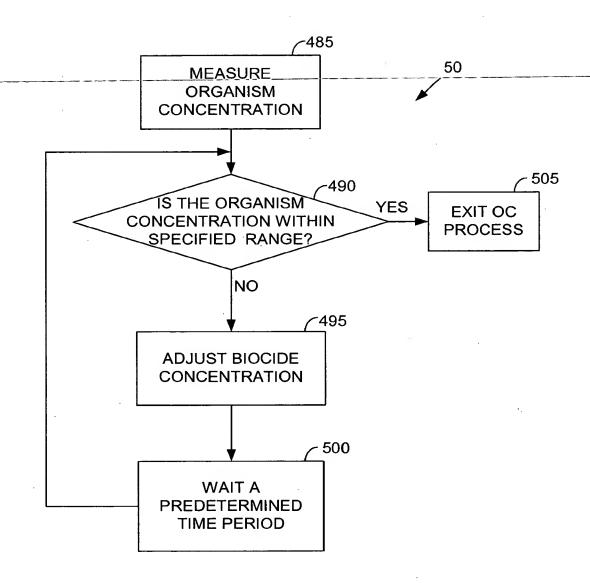


FIG. 9